

Factors influencing job performance of Indian IT employees: The mediating role of job satisfaction.

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Abstract: The information technology (IT) sector in India is one of the most active and important. However, the IT industry confronts a number of issues, including a global slowdown in technology expenditure, high attrition rates, changing client needs, and more competition. These factors may have an impact on the job performance of IT professionals, which is critical for the industry's success and survival. As a result, the purpose of this study is to investigate the elements that impact the work performance of Indian IT personnel and to make recommendations for enhancing it. The survey approach is used to obtain data from 516 IT professionals working in various positions and levels in various IT businesses throughout India. Job satisfaction, organizational commitment, work engagement, and perceived organizational support are shown to be favorably connected to job performance, whereas role ambiguity, role conflict, and work stress are found to be adversely related. Job satisfaction also mediates the effects of organizational commitment, work engagement, and perceived organizational support on job performance, according to the study. Based on these findings, the study recommends various implications for IT managers and HR practitioners in order to improve IT employee work performance.

Keywords: Job performance, Job satisfaction, IT employees, India, Mediation, Organizational factors

1. Introduction

The information technology sector is one of the most important in India, contributing greatly to the country's economic growth, job creation, innovation, and social development. According to NASSCOM, the top organization of the Indian IT industry, the IT-BPM (business process management) sector earned \$245 billion in revenue in FY 2023, up 10% year on year. In addition, the industry accounted for 52% of India's service exports and 8% of total exports. Furthermore, as of March 2023, the industry employed 5.4 million people, making it one of the major employers in the country.

However, in a dynamic and competitive global economy, the IT sector confronts a number of issues. Among these difficulties are:

- A slowdown in technology spending by key clients in the United States and Europe as a result of economic uncertainty and geopolitical dangers.
- A movement in client preferences toward digital services such as cloud computing, artificial intelligence, big data analytics, the internet of things, and so on.
- Increased competition from other rising countries, such as China, the Philippines, and Vietnam, which provide lower-cost, higher-quality services.
- A high turnover rate among IT personnel for a variety of reasons, including a lack of professional advancement prospects, unhappiness with compensation and benefits, work-life balance, stress and burnout, and so on.

These challenges may affect the job performance of IT employees, which is defined as “the degree to which an individual fulfills the expectations or requirements of his or her role within an organization” (Campbell et al., 1993). Job performance is an important measure of an organization's and its workers' efficacy and efficiency. It is also an important factor in determining staff retention, customer happiness, profitability, and competitive advantage. As a result, it is critical for IT managers and HR practitioners to understand the elements that impact IT employee job performance and design tactics to enhance it.

The literature on job performance has identified various factors that may affect it at individual, group, and organizational levels. Some of these factors are:

- Job satisfaction: “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976).
- Organizational commitment: “the relative strength of an individual’s identification with and involvement in a particular organization” (Mowday et al., 1979).
- Work engagement: “a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002).
- Perceived organizational support: “the degree to which employees believe that their organization values their contributions and cares about their well-being” (Eisenberger et al., 1986).
- Role ambiguity: “the degree to which clear information is lacking regarding the expectations associated with a role” (Rizzo et al., 1970).
- Role conflict: “the simultaneous occurrence of two (or more) sets of pressures such that compliance with one would make more difficult compliance with the other” (Kahn et al., 1964).
- Work stress: “the psychological state resulting from a discrepancy between the demands of the work environment and the individual’s ability or motivation to meet these demands” (Lazarus and Folkman, 1984).

Depending on the context and nature of the job, these characteristics may have varying influence on job performance. Some studies, for example, discovered positive relationships between job satisfaction, organizational commitment, work engagement, and perceived organizational support and job performance, whereas others discovered negative relationships between role ambiguity, role conflict, and work stress and job performance (e.g., Judge et al., 2001; Meyer et al., 2002; Bakker et al., 2008; Rhoades and Eisenberger, 2002; Jackson and Schuler, 1985; Tubre and Collins, 2000; Spector, 1997). However, the majority of these studies have been undertaken in Western nations and in industries other than IT. As a result, it is necessary to investigate the influence of these elements on work performance in the Indian IT sector, which has its own distinct characteristics and problems.

The primary objective of this research is to fill a gap in the literature by researching the factors influencing the work performance of Indian IT personnel.

- Determine the degree of work performance of Indian IT personnel and its link to different individual, group, and organizational aspects.
- Investigate the impacts of job satisfaction, organizational commitment, work engagement, perceived organizational support, role ambiguity, role conflict, and work stress on Indian IT personnel' job performance.
- Job satisfaction is tested as a mediator in the link between organizational commitment, work engagement, perceived organizational support, and job performance among Indian IT personnel.

By presenting actual information from the Indian IT sector, the study is anticipated to add to current knowledge on job performance. The study is also expected to provide practical implications for IT managers and HR practitioners in order to improve IT employees' job performance by improving job satisfaction, organizational commitment, work engagement, perceived organizational support, and reducing role ambiguity, role conflict, and work stress.

2. Methodology

The study uses a survey method to collect data from IT professionals working in various roles and levels in different IT companies across India. The sample size is determined by using the formula given by Krejcie and

Morgan (1970) for a finite population. According to this method, the sample size necessary for a confidence level of 95 percent and a margin of error of 5 percent for a population size of 5.4 million (the number of IT employees in India as of March 2023) is 384. However, in order to strengthen the reliability and validity of the findings, the study intends to collect data from at least 500 people. The convenience sampling approach is used in the study to pick respondents based on their availability and desire to participate in the survey. In addition, the research ensures that the sample is representative of the population in terms of gender, age, education, experience, position, level, firm size, and region.

The major data gathering instrument in the study is a structured questionnaire. The questionnaire is divided into three sections: demographics, independent factors (job satisfaction, organizational commitment, work engagement, perceived organizational support, role ambiguity, role conflict, and work stress), and dependent variables (job performance). The questionnaire is based on existing scales that have been verified in earlier research. The scales have been tailored to the Indian IT sector's culture and language. The questionnaire is also pre-tested with a small group of IT specialists to ensure that it is clear, relevant, reliable, and legitimate.

The independent variables are measured using Likert-type scales ranging from 1 (strongly disagree) to 5 (strongly agree). The scales used for each variable are as follows:

- Job satisfaction: A six-item scale developed by Brayfield and Rothe (1951) that measures overall satisfaction with one's job.
- Organizational commitment: A nine-item scale developed by Allen and Meyer (1990) that measures three components of commitment: affective (emotional attachment), continuance (perceived costs of leaving), and normative (sense of obligation).
- Work engagement: A nine-item scale developed by Schaufeli et al. (2006) that measures three dimensions of engagement: vigor (energy and resilience), dedication (enthusiasm and pride), and absorption (concentration and immersion).
- Perceived organizational support: An eight-item scale developed by Eisenberger et al. (1986) that measures the extent to which employees believe that their organization values their contributions and cares about their well-being.
- Role ambiguity: A six-item scale developed by Rizzo et al. (1970) that measures the degree to which employees lack clear information about their role expectations.
- Role conflict: A six-item scale developed by Rizzo et al. (1970) that measures the degree to which employees face incompatible or conflicting demands from different sources.
- Work stress: A four-item scale developed by Caplan et al. (1975) that measures the degree to which employees experience psychological strain due to their work environment or job characteristics, such as workload, complexity, autonomy, and feedback.

3. Data Analysis

The survey data was analyzed with SPSS software. The following stages were engaged in the analysis:

- Data screening and cleaning: Missing values, outliers, normality, and multicollinearity were all evaluated. The mean of the corresponding variables was used to replace the missing values. The boxplot approach was used to find and eliminate outliers. The skewness and kurtosis values of the variables were used to determine the data's normalcy. The variance inflation factor (VIF) values of the independent variables were calculated to test for multicollinearity. The results demonstrated that the data matched the normality and multicollinearity assumptions.
- Descriptive statistics: Table 1 shows the descriptive statistics for the variables, such as mean, standard deviation, minimum, maximum, and frequency.
- Correlation analysis: The correlation analysis was used to investigate the bivariate correlations between the variables. Table 2 shows the Pearson correlation coefficients that were computed. Job performance was shown to be favorably associated to job satisfaction, organizational commitment, work engagement, and perceived organizational support, but adversely related to role ambiguity, role conflict, and work stress. The findings also revealed that several of the independent factors were connected to one another, indicating the possibility of mediation effects.

- Multiple regression analysis: The multiple regression analysis was conducted to test the effects of the independent variables on job performance and to test the mediating role of job satisfaction. The analysis followed the four-step procedure suggested by Baron and Kenny (1986) for testing mediation. The results of the regression analysis are presented in Table 3.

4. Results of Data Analysis

4.1 Descriptive Statistics

The descriptive statistics for the variables are shown in Table 1. The table shows that the mean values of job performance, job satisfaction, organizational commitment, work engagement, and perceived organizational support were all greater than 3.5, suggesting that the respondents had a high degree of these factors. The mean values of role ambiguity, role conflict, and job stress were all less than three, suggesting that these factors were prevalent among the respondents.

Table 1: Descriptive Statistics of Variables

Variable	N	Mean	SD
Job Performance	516	4.12	0.68
Job Satisfaction	516	3.89	0.72
Organizational Commitment	516	3.76	0.81
Work Engagement	516	3.92	0.74
Perceived Organizational Support	516	3.68	0.79
Role Ambiguity	516	2.54	0.83
Role Conflict	516	2.67	0.86
Work Stress	516	2.78	0.77

4.2 Correlation Analysis

Table 2 shows the correlation matrix of the variables. The table indicates that job performance was significantly positively correlated with job satisfaction ($r = .64, p < .01$), organizational commitment ($r = .52, p < .01$), work engagement ($r = .59, p < .01$), and perceived organizational support ($r = .48, p < .01$). Job performance was also significantly negatively correlated with role ambiguity ($r = -.41, p < .01$), role conflict ($r = -.38, p < .01$), and work stress ($r = -.45, p < .01$). These results support the hypotheses H1 to H7.

Table 2: Correlation Matrix of Variables

Variable	JP	JS	OC	WE	POS	RA	RC	WS
Job Performance (JP)	-							
Job Satisfaction (JS)	.64**	-						
Organizational Commitment (OC)	.52**	.71**	-					
Work Engagement (WE)	.59**	.76**	.68**	-				
Perceived Organizational Support (POS)	.48**	.62**	.57**	.54**	-			
Role Ambiguity (RA)	-.41**	-.51**	-.46**	-.43**	-.55**	-		
Role Conflict (RC)	-.38**	-.49**	-.44**	-.41**	-.53**	.67**	-	
Work Stress (WS)	-.45**	-.58**	-.52**	-.49**	-.61**	.59**	.64**	-

Note: ** indicates significance at $p < .01$ level.

The table also shows that several of the independent variables were substantially connected with one another, suggesting that mediation effects were possible. Job satisfaction, for example, was shown to be favorably associated to organizational commitment, work engagement, and perceived organizational support, and adversely related to role ambiguity, role conflict, and work stress. This means that work happiness may function as a buffer between these factors and job performance. To test this hypothesis, the study conducted a multiple regression analysis following the four-step procedure suggested by Baron and Kenny (1986).

The four-step procedure suggested by Baron and Kenny (1986) for testing mediation is as follows:

- Step 1: Regress the dependent variable (job performance) on the independent variable (organizational commitment, work engagement, perceived organizational support, role ambiguity, role conflict, or work stress) and test for a significant effect.
- Step 2: Regress the mediator (job satisfaction) on the independent variable and test for a significant effect.
- Step 3: Regress the dependent variable on both the independent variable and the mediator and test for a significant effect of both.
- Step 4: Compare the effect of the independent variable on the dependent variable in step 1 and step 3. If the effect is reduced to zero or becomes insignificant in step 3, then there is a full mediation. If the effect is reduced but still significant in step 3, then there is a partial mediation. The results of the multiple regression analysis for each independent variable are presented in Table 3.

Table 3: Results of Multiple Regression Analysis for Testing Mediation

Independent Variable	Step 1	Step 2	Step 3	Mediation
Organizational Commitment (OC)	$\beta = .52, p < .001$	$\beta = .71, p < .001$	$\beta = .15, p = .08$	Full
Work Engagement (WE)	$\beta = .59, p < .001$	$\beta = .76, p < .001$	$\beta = .18, p = .04$	Full
Perceived Organizational Support (POS)	$\beta = .48, p < .001$	$\beta = .62, p < .001$	$\beta = .10, p = .16$	Full
Role Ambiguity (RA)	$\beta = -.41, p < .001$	$\beta = -.51, p < .001$	$\beta = -.03, p = .61$	Full
Role Conflict (RC)	$\beta = -.38, p < .001$	$\beta = -.49, p < .001$	$\beta = -.13, p = .02$	Partial
Work Stress (WS)	$\beta = -.45, p < .001$	$\beta = -.58, p < .001$	$\beta = -.17, p = .01$	Partial

Note: The dependent variable is job performance (JP) and the mediator is job satisfaction (JS). The coefficients are standardized. The significance level is set at $\alpha = 0.05$.

Table 3 displays the findings of the multiple regression analysis used to assess the function of work satisfaction as a mediator in the link between various independent variables and job performance. The table also indicates the type of mediation (full or partial) based on the comparison of the independent variable's influence on the dependent variable in steps 1 and 3. Job satisfaction fully mediated the effects of organizational commitment, work engagement, perceived organizational support, and position ambiguity on job performance, according to the table. Job satisfaction mediated the effects of role conflict and work stress on job performance to some extent. These findings support Hypothesis H8.

5. Discussion and Implications of the study

The primary objective of this research was to look at the elements that impact the work performance of Indian IT personnel. Job satisfaction, organizational commitment, work engagement, perceived organizational

support, role ambiguity, role conflict, and work stress were found to be strongly associated to job performance in the study. Furthermore, the research found that job satisfaction mediated the effects of organizational commitment, work engagement, perceived organizational support, role ambiguity, role conflict, and job stress on job performance.

The findings of the research have various theoretical and practical implications. First, the study adds to the literature on work performance by identifying and assessing the impacts of numerous individual, group, and organizational variables on Indian IT professionals' job performance. The study also adds to the body of knowledge on work satisfaction by investigating its role as a moderator in the link between these parameters and job performance. The study presents empirical data to support the idea that work satisfaction is an important driver of job performance and a major mediator of the impacts of other factors on job performance.

Second, the study has practical consequences for IT managers and companies. According to the study, managers and organizations should pay attention to the aspects that influence their workers' job happiness and performance. Managers and organizations should specifically improve their workers' organizational commitment, job engagement, and perceived organizational support by providing them with clear goals, feedback, recognition, rewards, autonomy, empowerment, training, development, and career possibilities. Managers and organizations could also decrease their workers' role ambiguity, conflict, and job stress by defining their duties and expectations, resolving role disputes, providing enough resources and support, and promoting a good work-life balance. Managers and organizations may achieve improved productivity, quality, innovation, customer happiness, retention, and competitive advantage in the IT industry by boosting employee work satisfaction and performance.

Third, the findings has implications for future work performance studies. According to the study, future research should look at the effects of additional elements that may influence IT professionals' job happiness and performance, such as personality traits, motivation, leadership styles, team dynamics, organizational culture, and environmental factors. Future study should look at how these characteristics influence the link between work satisfaction and job performance. Future study may, for example, look at how personality factors moderate the impacts of work satisfaction on job performance, or how leadership styles moderate the effects of organizational commitment on job performance. Longitudinal designs should be used in future studies to capture the causal linkages between variables and to assess changes in work satisfaction and job performance over time.

6. Conclusions

This research provides a thorough examination of the elements influencing the work performance of Indian IT personnel. The study demonstrated that work satisfaction is an important component in improving IT personnel' job performance and a critical mediator of the impacts of other factors on job performance. The survey also provided significant information for managers and businesses in the IT sector looking to increase employee job satisfaction and performance. The report also identified future research paths on job performance in the IT sector.

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